

DOCUMENT RESUME

ED 272 976

EA 018 699

AUTHOR Slawski, Carl
TITLE The Social Problem Solver for Designing Change.
PUB DATE 86
NOTE 21p.; Paper presented at the Annual Meeting of the Society for General Systems Research (Philadelphia, PA, 1986).
PUB TYPE Speeches/Conference Papers (150) -- Information Analyses (070)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Change Strategies; Classification; Groups; Interaction; Interpersonal Relationship; Models; *Organizational Theories; *Social Change; Social Problems; *Systems Approach

ABSTRACT

The aim of this paper is to summarize and tentatively synthesize a number of theories, typologies, and statements about systems and procedures for planned change in small groups, large organizations, and whole societies. Concepts are brought together from psychology, applied sociology, and business management, as well as diplomatic negotiation at the suprasystem level. Statements from Warren G. Bennis, K. D. Benne, and Robert Chin; Charles Darrah; and Gerald Nadler are discussed in terms of diagrams for insight into social problems presented in this paper. Five paradigms of psychotherapies are included plus 10 theories of sociological social problem solving in 3 paradigms that focus on the general "social problem solver" model. These in turn are related to the unit concept--"change in relationships"--which entails (1) discussing sources of change, institutionalized versus non-institutionalized; (2) comparing three analytic models of change; (3) examining the sources of resistance to change; and (4) making recommendations for initiating change in social organizations, societies, and groups. Included in the paper are 3 diagrams, 3 tables, and 21 references. (MLF)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

X This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to improve
reproduction quality.

Points of view or opinions stated in this docu-
ment do not necessarily represent official
OEI position or policy.

THE SOCIAL PROBLEM SOLVER FOR DESIGNING CHANGE

Carl Slawski
Sociology Department
California State University
Long Beach, CA 90840

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

*Carl
Slawski*

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC).

Presented in the Systems Design Section of the 1986 Society for
General Systems Research meetings in Philadelphia.
Long Abstract in Proceedings, pp. H69 - H71.

ABSTRACT

This paper will extend the author's paper on "A Unit Concept
for GST: 'Change in Relationships'" (1986 Proceedings) into the
realm of planned change in human activity systems. It will thus
deal less with concrete, quantitatively measurable, systems, and
more with abstract systems. This is so since human groups are by
most definitions abstract entities, and systems or procedures
developed to change them have no direct physical referents that
express the emergent properties such as role-taking, empathy,
definitions of the situation by the actor, generalized other, the
self concept of the acting individual, the social personality, or
group integration. The aim of this paper will be to summarize
and tentatively synthesize a number of extant theories,
typologies and statements about systems and procedures for
planned change in small groups and large organizations or even
whole societies. It will thus attempt to bring together concepts
from psychology, applied sociology, and business management, as
well as diplomatic negotiation at the suprasystem level.

INTRODUCTION

Statements of Bennis, Benne, Chin; Goodwin; Checkland (via
Darrach), and Nadler will be discussed in terms of the author's
own diagrams for insight into all kinds of social and social
scientific problems, including five paradigms of psychotherapies,
plus sociological social problem solving, using ten theories, in
three paradigms, but focusing on the general "social problem
solver" model. These will all in turn be related to the unit
concept, "change in relationships." This will entail 1)
discussion of sources of change, institutionalized vs.
non-institutionalized, 2) comparing three analytic models of
change, 3) examining the sources of resistance to change, and 4)
making recommendations for initiating or instituting change in
social organizations, societies, and groups.

One key value of this approach will be to see the
similarities and differences between the study of abstract vs.
concrete systems, with their ultimate complementarity, but
separate use for quite different yet wholly worthwhile purposes.
The ultimate goal of such synthetic yet holistic study of
concrete systems is to synthesize in order to make the
disciplinary knowledge and theories more understandable and

ED272976

EA 018 699

abstractly applicable by theoreticians and thinkers per se; the goal for practical, yet abstract, procedural systems is to make them more directly applicable in terms of prevention, coping, and cure by professionals and practitioners or self-helpers to real, i.e., relatively "concrete," meaningful, serious, immediately pressing social problems, involving puzzling personal, interpersonal, interactional, group, organizational, and societal issues.

I. TYPES AND OVERVIEWS

The variety of "unit concepts" for virtually all academic and professional disciplines have been shown to allow convergence on the concept of "change in relationships." The next theoretically pressing problem is to extend this notion to the practical procedures for "planning change" in human activity systems. Hopefully the discussion in this paper focusing on planning change in human social groups will have parallels in the planning of change in the hard sciences and engineering technology as well. Essentially, however, this paper will be an exercise in synthesizing procedural models in concrete and regularly functioning human groups of either a formal or informal nature, primary or secondary, task or socio-emotionally oriented.

The idea of the unit concept, the single theoretically guiding tailfin of the spaceship earth, must be extended a bit to encompass the surrounding cluster of ailerons, wings, body and engine, cargo hold, and cockpit, and certainly to the passenger compartment. A single concept of planning change must be fleshed out in a way that allows various systems of initiating and maintaining change in social structures to be systematically compared and thus boiled down to the bare bones without losing the reality of the various survivable or servicable locations of the internal organs and the flesh to be held up by the bone structure. In order to achieve this end the author will build upon his own "social problem solver" diagram introduced in the (1985 SGSR meetings) paper, "Acts of Insight," and continued along the lines of the "unit concept" (another 1986 paper) on "change in relationships."

A seminal work on types of change process is that of Warren Bennis (1969; see Table 1) cross-classifying institutionalized vs. non-institutionalized sources of change to the level of planning ranging from normal to mixed (partly normal and partly pathological) to pathological. These types of change process could occur in some cases at the intrapersonal level as well as at the interpersonal, organizational, community, societal, cultural, or international level. The time period for enacting change may be either long and slow or short and fast.

Four major cells, some with three subcells within them, could be seen in the tabulation. The first cell, called institutionalized intentional change includes in the normal aspect: formal socialization, education, formal role training,

Table 1:
TYPES OF CHANGE PROCESS

		SOURCE OF CHANGE:	
		INSTITUTIONALIZED	NOT INSTITUTIONALIZED
	<u>Object</u>		
PLANNED	Normal:	Formal Socialization Education Formal role training	Persuasion Selling Seduction Coaching Consultation Human relations training
	Mixed:		
	Pathological:	Institutional therapy Rehabilitation Brainwashing	Therapy (individual)
UNPLANNED	Normal:	Unintended consequences of the above processes Balance of power	Emergent Change Coping Gravitate to rewards Dialectic Actualization Revolution Innovator
	Mixed:	Functions of ignorance (Moore and Tumin, e.g., preserve status quo) Dilemmas of institutio- nalization (O'Dea, e.g., Letter supersedes Spirit) Level gaps	
	Pathological:	Balance of terror Polarization	Rebel
		(Functional)	(Interactional) (Conflict)

Crosscutting aspects:

- A. Context or level
of interaction: Intrapersonal, Interpersonal, Organizational,
Community, Societal, Cultural, International.
- B. Time period: Long, slow vs. Short, fast

Adapted from W. Bennis, et al (eds.), Interpersonal Dynamics.

[spschqpb.fws--7/27/86]

implementing organizational theory (such as theories X, Y or Z). In the pathological aspect it includes: institutional therapy, rehabilitation, and brainwashing.

The second of the four major cells, called the non-institutionalized, intentional, includes in the normal aspect: persuasion, selling seduction, coaching, consultation, and human relations training. In the pathological aspect it includes primarily individual therapy.

The third cell, called the institutionalized unplanned includes in the normal aspect: unintended consequences of the institutionalized intentional (above), as well as the balance of power process. In the mixed aspect it might include: the functions of ignorance (a la Moore and Tumin, 1949), the dilemmas of institutionalization of religion (O'Dea, 1961), and the leveling of gaps in the institutional structure. In its pathological aspect it would include the balance of terror and polarization.

The fourth and last major cell is called non-institutionalized unplanned. It includes in its normal aspect several varieties of emergent change: copying, gravitation to rewards, dialectic, actualization, structural strain, role bargaining, revolution, and the innovator. In its pathological aspect (from the point of view of the status quo) it would include the rebel.

Bennis' typology is crude and overlapping, as he admits, but it does go a step beyond a consideration of the four change variable, of Task, People, Technology, and Structure. This kind of typology is good for jogging the associative memory and brainstorming for ideas when sizing up a group that is in need of change. Seven other approaches differ, as L. B. Barnes (1967) suggests (in Bennis, 1969), along lines of power distribution, goal setting, and change implementation. They are indoctrination, change, coercive, technocratic, interactional, socialization, emulative, and natural change. Greiner (1965) identified the most commonly used approaches: the decree, replacement, structural, group decision, data discussion, group problem solving, and the T-Group.

R. Chin (in Bennis et al, 1969; see Table 2) suggests some models of change regarding their assumptions and approach along similar but somewhat more global, analytic lines. His three basic models are the system model, developmental model and the model for changing the intersystem. His tabulation can be highlighted as follows: Under assumptions and approaches to change: 1) The System Model sees change as derived from structure; 2) the Developmental Model sees change as constant and unique; 3) the (apparently preferred, or at least most applicable to planned change) Model for Changing the Intersystem is INDUCED AND CONTROLLED. In turn, the source of change for the three models is 1) structural stress, 2) the nature of organisms, and 3) SELF AND THE CHANGE-AGENT. The goal of intervention is, in

Table 2:
Assumptions and Approaches of Three Analytic Models

MODELS OF CHANGE			
Assumptions and Approaches to:	System Model	Developmental Model	Model for Changing: Intersystem
1. Content:- Stability Change	Structural Integration Derived from structure	Phases, stages Constant and unique	Unfreezing parts Induced, controlled
2. Causation:- Source of change Causal force	Structural stress Tension reduction (creation?)	Nature of organisms	Self and change- agent Rational choice
3. Goals:- Direction Set by	Emergent "Vested interests"	Ontological	Deliberate selection Collaborative process
4. Intervention:- Confronting symptoms Goal of intervening	Stresses, strains, and tensions Adjustment, adaptation	Discrepancy between actuality and potentiality Removal of blockages	Perceived need Improvement
5. Change-Agent:- Place Role	Outside the "target" system External diagnoser and actor	Outside External diagnoser and actor	Part of situation Participant in here and now

From Robert Chin, "The Utility of Systems Models and Developmental Models for Practitioners," pp. 297-312 in W. Bennis, K. Benne, and R. Chin (eds.), *The Planning of Change*, 2nd ed., New York: Holt, 1969.

turn, 1) adjustment or adaptation, 2) the removal of blockages, and 3) IMPROVEMENT. The role of the change-agent is, in turn, 1 & 2) the external diagnoser and actor, and finally 3) the PARTICIPANT IN THE HERE AND NOW.

Bela Banathy in his 1985 Proceedings paper among other things also refers to three main types of models for systems of design, the System-Environment, the Structural, and (the apparently preferred) PROCESS model. This seems to agree with the tenor of the present paper's emphasis on "changing relationships," or systems for designing change.

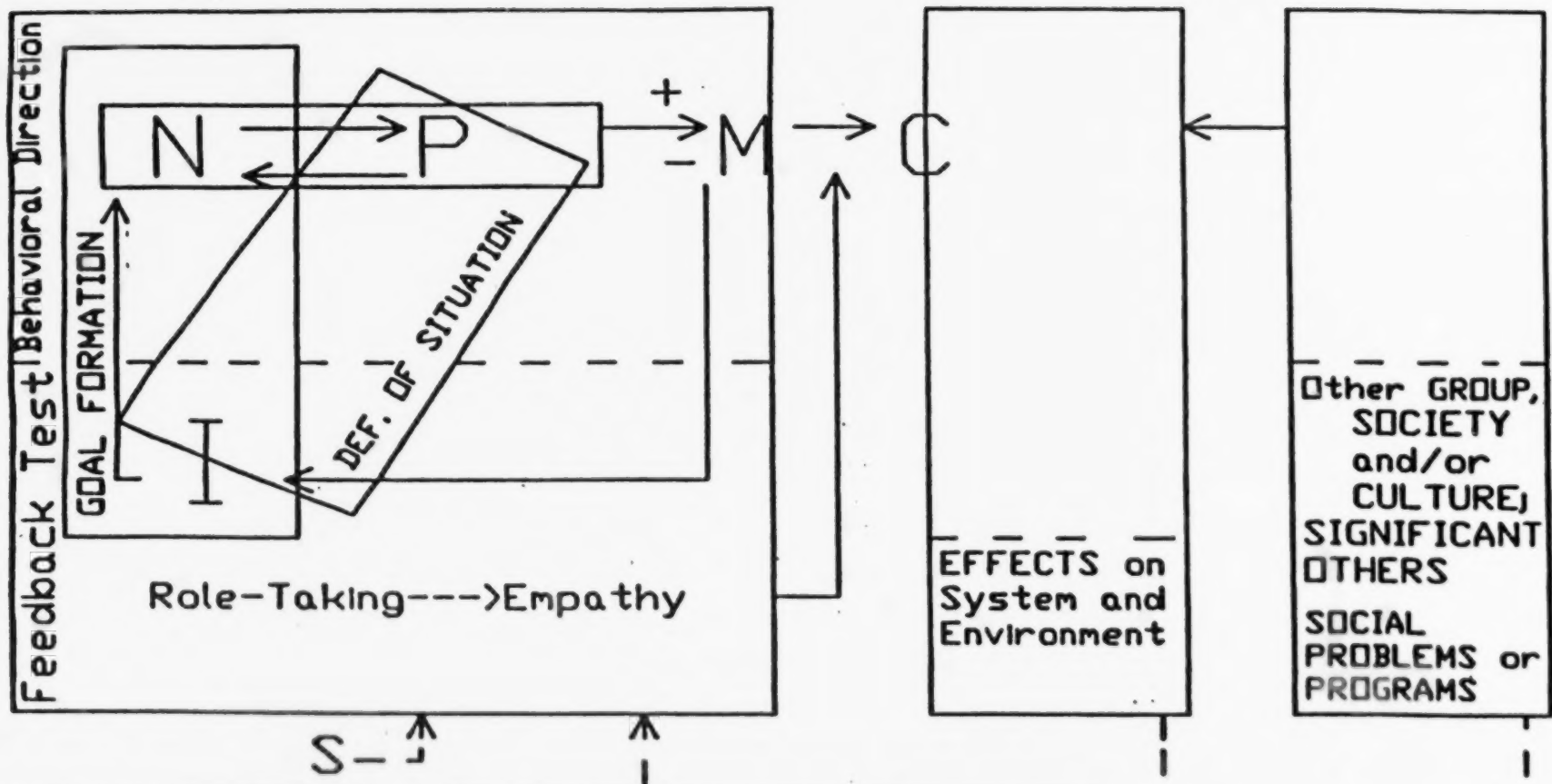
II. THE SOCIAL PROBLEM SOLVER MODEL

George Herbert Mead's Stages of the Reflective Act (discussed in more detail in Slawski's 1985 Proceedings Paper) provides a very general model in conjunction with W. Buckley's prototypical flow diagram relating the control center to the system as a whole. DIAGRAM I is this author's way of seeing the American Pragmatist view (in terms of G. H. Mead) of the reflective, human act in a systems perspective. What is left is to drop out the social psychological concepts and insert those concepts most relevant to whatever social process or brainlike mechanisms we wish to consider.

Thus, DIAGRAM II, the SOCIAL PROBLEM SOLVER, inserts the most applicable concepts for virtually any model of planned change or system design. It can be summarized in four words or phrases, noted at the bottom of each of the four boxes in the flow diagram, namely, I. PURPOSE, II. PROBLEM, III. PROGRAM, AND IV. PAST socio-emotional PROFIT. The specific questions that one must ask in order to solve virtually any social or organizational problem are within box I. PURPOSE, including previous needs, GOALS, and thoughtways: What thoughtways must CHANGE? What is your main PURPOSE? What crucial DECISIONS must you make? What RESISTANCES must you meet? And how can the most preferred procedural alternative be set up in the five-step PROGRAM DEVELOPMENT LADDER (of R. Cash et al, 1975).

In Diagram II, within box II, PROBLEM: What have been the past EFFECTS on the System? What are the desired future effects of the individual (or collective, or group) actions? What PROBLEMS do you have in achieving your GOAL(S)? Within box III, PROGRAM: What are the most important GROUP factors? What existing HELPING groups are available that might be of some assistance in solving the present problem? What types of aid PROGRAMS are there that have been effective on similar problems in the past? What are the indirect devices or organizational procedures or plans of action that could be used to help solve the present problem? At a more general level, what sociological or social psychological THEORIES apply?

Within box IV, PAST Socio-Emotional PROFIT, we deal with feedback. What are the WAYS to gather the optimal form of information? What information has been gathered about the



G.H. Mead's Stages of the Reflective ACT: DIAGRAM I.

- = BLOCKAGE/PROBLEM
+ = Open Gate to ACTION

SLAWSKI ---/---/---

MECHANISMS FOR INFORMATION GATHERING ON OUTPUT EFFECTS

N = Needs/Impulses
P = Perceptions
M = Manipulation
C = Consummation
I = Image(s)
[Legend]

Previous needs, GOALS, thoughtways!
What thoughtways must CHANGE?
What is your main PURPOSE?
Crucial DECISIONS you must make?
RESISTANCES you must meet?
PROGRAM DEVELOPMENT LADDER?

I. PURPOSE

Past EFFECTS
on System?
Desired
Future
Effects?

What
PROBLEMS
do you
have in
achieving
your
GOAL(S)?

II. PROBLEM

GROUP
Factors?
Existing
HELPING
Groups?
Aid
PROGRAMS?
Indirect
Devices?

What
Social
or Psych.
THEORIES
Apply?

III. PROGRAM

SOCIAL PROBLEM
SOLVER

Ct11SPS.Dwg

∞ SLAWSKI ---/---/---

WAYS to gather optimal information?
Information Gathered? Sources?
Is feedback POSITIVE or
Negative?
RESULTS of recent efforts?

IV. PAST Socio-Emotional PROFIT

7/9/85
DIAGRAM II.

problem? What sources or information on the problem are available? Which aspects of feedback so far are either positive or negative? What have been the RESULTS of recent efforts to solve the current problem or type of problem?

Although these various questions may not, and need not, be answered in the order listed, it is important to provide answers to all of these questions as fully as possible in order to achieve the REQUISITE VARIETY of ideas as well as to account for the REQUISITE SALIENCY (or Shifting Limits) of the problem.

The author's previous paper on "Acts of Insight" (1985) showed how this type of graphic model has virtually the same goals as the General Systems movement as a whole. Many social and psychological theories were presented there to illustrate the point. A long appendix is available for that paper which elaborated upon the possible applications along with a detailed bibliography. Further diagrams are available for a large number of theories in sociology, social psychology, psychology, psychotherapy, and social problems. There is not space in this paper to include more than a hint at the variety of such applications already diagramed by the author, such as the sixteen theories of social psychology, ten of social problems, six for psychotherapy, three major paradigms of sociology, twenty-two key sociological concepts, as well as Miller's nineteen subsystems for each among his typology of (what are now his) eight Living Systems.

In an attempt to relate the above key Diagram I to the author's paper on "Unit Concepts for GST," presented in the Philosophy Section of these 1986 meetings (in Proceedings), we will reprint and review (as Diagram III) the key diagram of that paper. Thus, we can view Person A vs. Person B at "time 1" and "time 2". Person A corresponds to the large box in the upper left quadrant of the key diagram. Person B (or any group or society or significant other) naturally fits in the rectangle in the upper right side of the diagram. Since the process is ongoing, we see that the person behaves or acts, or conducts himself, in a continually recycled process. Each recycled set of interactions represents a new point or period of time, from 1 through n. One might also arrange several such diagrams side by side with one another as interlocking subsets of the whole system. Each separate diagram represents another control (typically a micro-level subsystem, namely) system A versus its encompassing environmental or systemic macrosystem B.

In another, more applied vein, the upper left Box A may be seen as the main protagonist in the problematic situation. The upper right box may then be seen as the most relevant Pressure Group(s) in the problematic situation. These are not merely available helping or therapeutic groups that help one cope, but rather groups that actively try to change the controlling system or values of the most relevant collectivities.

III. COMPARING SYSTEMS FOR "CHANGING RELATIONSHIPS"

In part, the concepts of the central Diagram II of this paper were extracted from concepts of Checkland (as seen in Darrah, 1985) and Nadler (1985). A side by side comparison is given here, in Table 3, of the seven step procedure of Checkland versus the five steps of Nadler. We see there that their separate stages or steps do not directly correspond (as would be the case for directly parallel points stated on the same latitude in the chart). But they do not in any case contradict one another. One might conclude that all the steps of both authors (the seven steps of Checkland, and the five of Nadler) are necessary for the most complete analysis of a problem. Or we might, on the contrary, decide on one or the other system on the basis of using Occam's razor, assuming that an intelligent user of either system of analysis or systemic design will inevitably fill in the gaps that will at least implicitly cover the steps of the alternate system. Or we could be moved to integrate or restate the two fine systems into one that more pointedly synthesizes the two in ways that are likely to be more effective both for purposes of theoretical integration and practical application. The latter choice is the one chosen for the present paper. The bases for integration are the more general philosophical notions of George Herbert Mead's American Pragmatist social psychology. The aim of this synthesis is to give both systems praxes or what might alternately (at least mostly) rational change procedures a more holistic breadth of perspective. The present usage can make it possible to multiply such specific guidelines or steps or stages by placing each in its natural domain (in diagram II) in relation to box I) the control center, II) the larger environment or whole system, together with III) the effects on the system and environment per se, and finally, IV) the information gathering procedures.

Bennis et al have provided a very comprehensive historical tree of schools of thought and authors of various strategies of deliberate changing (1969: 58-59). These multiple strategies are classified in four general classificatory dimensions, namely, 1) the rational-empirical (views of the enlightenment and classical liberalism); 2) the normative (views of therapists), which is closely related to 3) the re-educative (views of trainers and situation changers); and 4) the power-coercive. These approximately one hundred strategies or schools or thinkers provide a rich pool of information from which to select the most appropriate for virtually any situation demanding planned change or systems design. But how do we select the best? How can we narrow our choices to meet the Law of Parsimony?

In order to establish the utility of the SPS (Social Problem Solver) procedure, it might be instructive here to examine Warfield's OFM, Options Field Method, or his OPM, Options Profile Method, since he considers that they both meet his proposed three laws for choosing a method of design, Requisite Variety,

Table 3:
A JUXTAPOSITION OF SYSTEMS PRAXES
OR CHANGE PROCEDURES

CHECKLAND (via Darrah, 1985)

1. Build a "rich picture" of the situation.
2. Formulate it in terms of structure, process and climate.
3. Develop "root definitions" (or ideal types in this situation) of the systems.

4. Elaborate definitions into fuller conceptual models.

Real World issues below:

5. Compare conceptual models with the problem situation and sift based on above conceptual description.
6. Use gap detection process to develop feasible and desirable changes in the system by its stakeholders.
7. Take action to improve the problem situation, and
A) Renew the cycle.

NADLER (1985)

1. Determine the needed purpose(s) in its hierarchy(ies) of purpose.

2. Generate purposeful alternate ideas.

3. Develop feasible ideal solution target.

4. Develop and detail solutions

5. Install proposed designs and

- A. Follow up (i.e.,
Observe the results).

Requisite Parsimony, and Requisite Saliency (formerly known as the Law of Shifting Limits). Let us try the latter Method, namely, OPM. (A familiarity with the Method must be presumed here in the interests of space.) Steps 1, 3, 5a and 5b (of the OPM Method) fit into the present SPS model in box I, representing the control system or reflective actor. [These steps of OPM are: 1. Select an option (simple or compound) from the first dimension in the Options Field. 3. Rule out dependent options in the cluster. 5a. An option has been selected in all dimensions, OR 5b. If some dimension is blocked, start over in its cluster and proceed as before.] Step 2 corresponds to the behavioral arrow emanating from box I. [Step 2 is: Tie the selected option to the Tie Line.] Step 4 overlaps box I and the same behavioral arrow. [Step 4 is: Repeat Steps 1-3 for the second dimension in the Options Field.] Falling into box III would be his "givens," the design group and the meeting room, as well as implicitly the potential range of options. Falling into box IV would be the options field itself. The ultimate consensus on the best design procedure would fall into box II. In other words, the consensus involves decisions made collectively by the individual actors in the design team.

It seems from the perspective presented in this present paper, in particular from the paucity of ideas from OPM falling into the upper right box (# III), that the OPM does not adequately specify the range of possible options or how these are taken into account, nor the larger social system influences, let alone pressure groups and interest groups or societal values that might constrain the deciders or their decisions. On this basis the present author would question the adequacy of the OPM on the law of Requisite Variety. However, with the reminders implied in the present SPS model and diagram, the OPM can be amplified for more complete coverage and information value regarding the influences of the larger social system. Thus, this one insight is only one justification of the value of employing the present Social Problem Solver diagram.

IV. SYNTHESSES OF THEORIES AND CONCEPTS

Some sources of "Resistance to Change" are provided by Watson (1966, as printed in Bennis et al, 1969). These can provide us with further thoughts on the variety of applicability of the present perspective. He provides eight sources of resistance to change in personality, namely, homeostasis, habit, primacy, selective perception and retention, dependence, superego, self-distrust, and insecurity and regression. Five sources of resistance to change in social systems are as follows: conformity to norms, systemic and cultural coherence, vested interests, the sacrosanct, and rejection of "outsiders."

He then provides a summary of twelve recommendations to counter such resistance under three broader categories: WHO brings the change?: 1. Participants should feel the project is their own. 2. It should have whole-hearted support from top officials. WHAT kind of change?: 3. Participants should see the

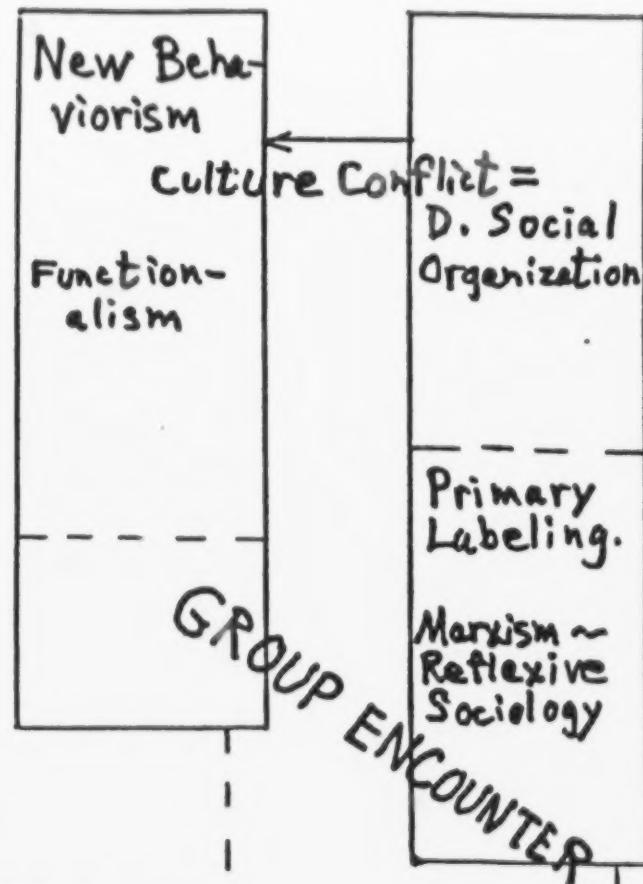
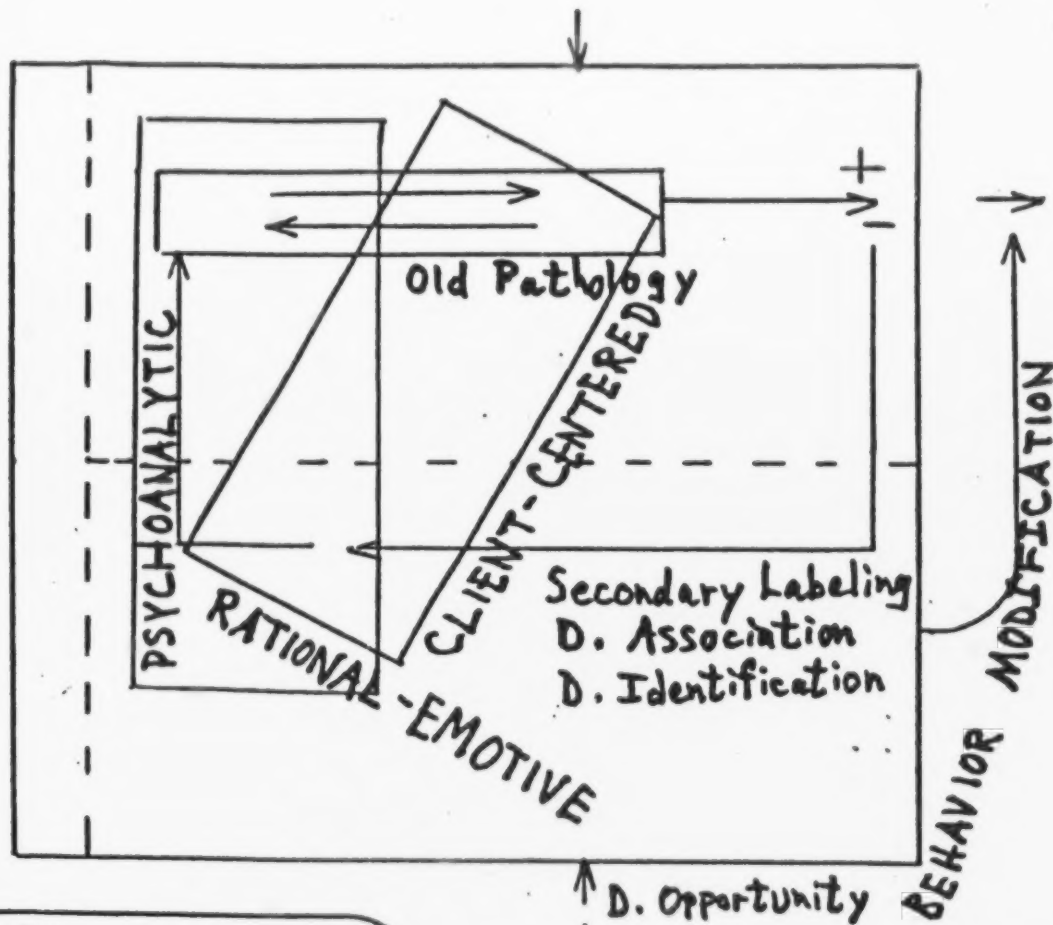
change as reducing their present burdens. 4. The project should accord with values and ideals long acknowledged by participants. 5. The new experience should interest the participants. 6. They should feel that their autonomy and security is not threatened. PROCEDURES in instituting change: 7. Participants should join in the diagnostic efforts. 8. Adopt the project by group consensus. 9. Proponents should empathize with opponents, recognize valid objections, and move to relieve unnecessary fears. 10. Provide for feedback and clarification of misunderstood and misinterpreted innovations. 11. Participants should experience acceptance, support, trust, and confidence in their relations with one another. 12. Resistance will be reduced if the project is kept open to revision and reconsideration if experience indicates that changes would be desirable.

In the light of the SPS model, these twelve recommendations are encompassed first by a consideration of the more general model of the reflective act, which highlights empathy or role taking and the definitions of the situation, plus significant others and possible aid programs. The specific questions of the SPS design model, with a minimum of adaptation, make the reflective act directly relevant to the problem of designing change and overcoming resistance.

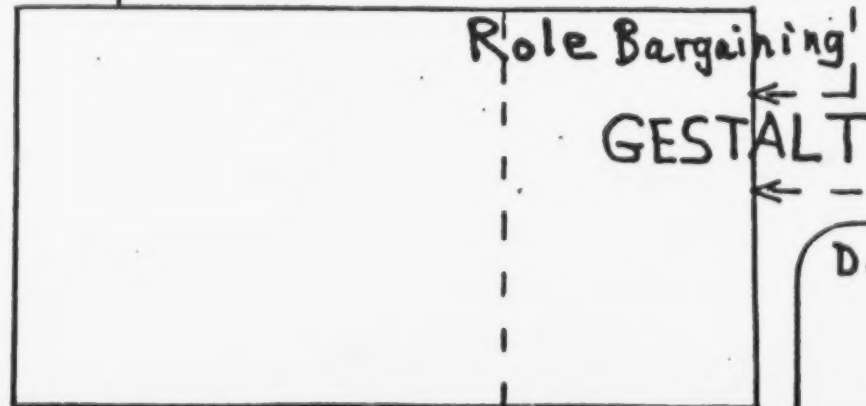
A final graphic, DIAGRAM IV, will superimpose, in the approximate location on the key diagram/template, six paradigms of psychotherapy (the psychoanalytic and the client-centered, but the most applicable being group encounter, gestalt [including the T-Group], with elements of behavior modification and perhaps rational-emotive psychotherapy). The same diagram will also show the central conceptual location of ten theories for solving social problems (the most directly important being Differential Social Organization [DSO], Differential Opportunity [DO], Exchange and Role-Bargaining, but also locating the theories of Old Pathology, New Behaviorism, Culture Conflict, Functionalism, Labeling and Marxism).

Similarly, the author's list of twenty two key sociological concepts can be located on the same diagram (though there will not be space for reproducing this diagram in the present paper). The reader could attempt to do this himself with these concepts, namely, the reflective act, values, sentiments, empathy, self control, the definition of the situation, the reference group, accommodation, the social act, exchange, power, conflict, social function, dialectic, career, class, bureaucracy, norms, roles, group integration, social and cultural organization, and social control. This classification is again ready to provide numerous suggestive ideas for new direct and indirect insights into any given problem for analysis.

The major sociological theories could also be so arrayed. But let us content ourselves here with simply locating the three most broadly stated paradigms. Behaviorism overlaps box I and II. Social Factism overlaps boxes II and III. And Definitionism overlaps boxes I and IV.



PARADIGMS for
PSYCHOTHERAPY:
6 in CAPS.
10 Social Problems
DIAGRAM III.



D. = Differential

The same three major sociological paradigms also fall in similarly complementary fashion upon the 4x4 overall typology of structural forms and styles of change. This is done in the author's other paper at this 1986 meeting, "A Unit Concept for GST." To briefly repeat, Social Factism emphasizes an equilibrium and evolutionary style of change, a largely flux, but to some extent organic patterning of bonds. Behaviorism focuses on particles and spaces, though sometimes on flux and nearly always on equilibrium, or perhaps on how to change units or persons to achieve states of equilibrium. Definitionism focuses on organic and flux patterns, but on the conflict or rise-and-fall styles of change. This is simply one other way to see alternate patterns of theorizing, patterns indeed complementary to the SPS model.

SIGNIFICANCE OF SPS MODEL

The SPS model presented here hopefully shows the categories that need to be applied at a more concrete level for a very wide variety of specific situations or problems of both a theoretical or practical nature. Once the origins and basic concepts are understood, it is relatively easy to apply, as long as one is aware of the range of variables relevant to the situation. It thus meets the Law of Requisite Saliency (Warfield, 1986) formerly known as the Law of Shifting Limits (Warfield, 1982). The law states in effect: Diminish the design dimensions that limit performance.

The present model has higher information value than a simple taxonomy and helps to order the relationship of the variables selected in an understandable way. It suggests alternate yet plausible orders for arranging the concepts, especially via the multiple overlays that can be fit upon the basic schematic diagram. It thus meets the Law of Requisite Variety (Ashby) because it surely encompasses a sufficiently wide range and number of concepts and schemes. Similarly, it can suggest ways to predict outcomes or effects of the prescribed interaction on the whole system of interaction.

The SPS model can be used to provide several levels of explanation simultaneously for the given problem. It may, for example, facilitate our explanation with more than one practical program and more than one general theory or alternate paradigm. It thus provides one basis for a more general synthesis of both abstract and concrete systems or the interrelation of complementary yet overlapping social and/or psychological theories. It thus also meets G. A. Miller's Law of Requisite Parsimony (1956). Finally, it provides the user with a process for generating insights into the problem, often serendipitously.

REFERENCES

- Ashby, W. Ross
 1958 "Requisite Variety and Its Implications for the Control of Complex Systems." *Cybernetica* 1 (2): 1-17.
- Banathy, Bela H.
 1985 "Design Inquiry in the Context of Human Activity Systems: Design Systems and Systems Models." In *Proceedings of the SGSR*: 740-746.
- Barnes, Louis B.
 1967 "Organizational Change and Field Experiment Methods." In Victor Vroom, *Methods of Organizational Research*, Pittsburgh, PA: University of Pittsburgh Press. Reprinted in Bennis et al, *The Planning of Change*, 1969.
- Bennis, Warren G., K. D. Benne, and Robert Chin (eds.)
 1969 *The Planning of Change*, 2nd ed. New York: Holt, Rinehart and Winston.
- Cash, Robert W., Dale Scherta, and Shirley Mills
 1975 *Human Resources Development Trainer's Manual*. Pasadena, CA: Human Communications Press.
- Checkland, P. D.
 1981 *Systems Thinking, Systems Practice*. New York: John Wiley and Sons.
- Chin, Robert
 1961 "The Utility of System Models and Developmental Models for Practitioners." From W. Bennis, K. Benne, and R. Chin (eds.), *The Planning of Change*, 1st ed. Reprinted in 2nd ed., 1969.
- Darrah, Charles
 1985 "Anthropology and Soft Systems Practice." In *Proceedings of the Society for General Systems Research*: 497-502.
- Mead, George Herbert
 1938 *Philosophy of the Act*. Ed. by C. W. Morris. Chicago: University of Chicago Press.
- Miller, G. A.
 1956 "The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information." *Psychological Review* 63 (2): 81-97.
- Moore, Wilbert E., and Melvin M. Tumin
 1949 "Some Social Functions of Ignorance." *American Sociological Review* 14 (December): 787-795.

Nadler, Gerald

- 1980 "Relating Systems Concepts and Public Planning." Policy Sciences 12: 283-299. Describes the PTR approach.
- 1985 "An Assessment of Systems Methodology and Design," in Proceedings of the SGSR: 730-739.

O'Dea, Thomas F.

- 1961 "Five Dilemmas in the Institutionalization of Religion," Journal for the Scientific Study of Religion 1 (October): 32-39.

Slawski, Carl

- 1982 "A General Policy Systems Approach to Organizational Governance." In Proceedings of SGSR, Washington, D.C.: 875-885.
- 1985 "Acts of Insight: A Metalogue on Creating Scientific, Isomorphic, Analogic, Dynamic Meta-Mandalas." In Proceedings of SGSR, Los Angeles: 329-338.
- 1986 "A Unit Concept for GST: "Change in Relationships." In Proceedings of SGSR, Philadelphia, pp. C31-C52.

Warfield, John N.

- 1982 "Organizations and Systems Learning." General Systems XXVII: 5-74.
- 1985 "Developing a Design Culture in Higher Education: Some Laws and Principles of Design." In Proceedings of SGSR: 725-729.
- 1986 "Education in Generic Design." In Proceedings of SGSR, Philadelphia, pp. H22-H33.

Watson, Goodwin

- 1966 "Resistance to Change." In W. Bennis et al, The Planning of Change, 2nd ed., 1969: 488-498. From G. Watson (ed.), Concepts for Social Change, Cooperative Project for Educational Development Series, vol. 1, Washington, D.C.: National Training Laboratories.

Biography: Educated mainly in physics, classics, English literature, philosophy, psychology and sociology. Study of systems theory stimulated by courses under Walter Buckley and W. Ross Ashby. Ph.D. in Sociology, University of Illinois, Urbana, 1969. Listed in American Men and Women of Science. Author of Social Psychological Theories, Random House, 1981.